

WHAT IS CLAIMED IS:

1. A film bridge for a film scanning system, comprising:

a first bridge member having a film facing surface to support photographic film moving relative to the bridge;

5 a second bridge member having a film facing surface to support photographic film moving relative to the bridge, wherein the bridge members are spaced so as to define an opening between the bridge members for passing radiation through film traveling over the film facing surfaces; and

a material applied to the film facing surface of at least one of said bridge members.

2. The film bridge as recited in claim 1, wherein the material has a length which is less than the width of the film between transversely spaced sprocket holes.

3. The film bridge as recited in claim 1, wherein the material comprises a coating.

4. The film bridge as recited in claim 1, wherein the bridge members comprise parallel elongated rigid strips, wherein each strip is curved in the film travel direction, and wherein the opening comprises an elongated slot defined between the strips.

5. The film bridge as recited in claim 1, wherein the bridge members comprise rollers.

6. The film bridge as recited in claim 1, wherein the material comprises a friction reducing material.

7. The film bridge as recited in claim 1, wherein the material comprises a coating including at least one of polytetrafluoroethylene, a diamond material, nickel, and anodize.

8. A film bridge for a film scanning system, comprising:

a first film roller positioned substantially orthogonally to a film travel direction and having a film facing surface to support photographic film moving relative to the film bridge;

- 5 a second film roller positioned substantially orthogonally to the film travel direction and having a film facing surface to support photographic film moving relative to the film bridge, wherein the first and second film rollers are spaced in the film travel direction so as to define an opening between the rollers for applying radiation to film traveling over the film facing surfaces of the rollers; and
- 10 a mounting assembly supporting the film rollers.

9. The film bridge as recited in claim 8, further comprising:

a first shaft provided through the center of the first roller and mounted to the mounting assembly such that the first roller is rotatable about the first shaft; and

- 5 a second shaft provided through the center of the second roller and mounted to the mounting assembly such that the second roller is rotatable about the second shaft.

10. The film bridge as recited in claim 8, wherein each roller has a length which is less than or equal to the width of the film between the film sprocket holes, such that sprocket holes of film traveling over the rollers during operation do not contact the rollers.

11. The film bridge as recited in claim 8, wherein the spacing between the rollers is not an integer multiple of the longitudinal distance between film sprocket holes.

12. The film bridge as recited in claim 11, wherein the spacing between the rollers is a half multiple of the longitudinal distance between film sprocket holes.

13. The film bridge as recited in claim 11, wherein the spacing s between the rollers is related to the longitudinal distance d between film sprocket holes by the equation:

$$s = (i.5)(d)$$

wherein i is a positive integer.

14. A digital film processing system, comprising:

- a source configured to apply radiation to developing film;
- a sensor configured to sense radiation from developing film; and
- a film bridge configured to support developing film without contacting the sprocket holes of the developing film, as the source applies radiation to developing film.
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15. The digital film processing system as recited in claim 14, wherein the film bridge comprises a pair of spaced rollers defining an opening through which the radiation is applied to developing film.

16. The digital film processing system as recited in claim 14, wherein the rollers have a length less than or equal to the width of the film between the sprocket holes.

17. The digital film processing system as recited in claim 14, wherein the film bridge comprises a pair of parallel rigid strips defining a slot through which the radiation is applied to developing film.

18. The digital film processing system as recited in claim 17, wherein the film bridge comprises friction reducing material applied to at least one of said strips.

19. The digital film processing system as recited in claim 14, wherein the bridge comprises a pair of spaced side rollers configured to contact developing film near the film side edges.

20. The digital film processing system as recited in claim 19, wherein each side roller includes a guide wall to restrain lateral movement of the developing film.

21. The digital film processing system as recited in claim 19, wherein the spacing between the side rollers is greater than the width of film between sprocket holes.

22. The digital film processing system as recited in claim 14, wherein the digital film processing system is adapted to combine digital images created at multiple film development times to create a single enhanced image.

23. A film bridge for a digital film scanning system, comprising:

a first side roller configured to support a first side edge of photographic film during film scanning; and

a second side roller transversely spaced from said first side roller and configured to support a second side edge of photographic film during film scanning.

24. The film bridge as recited in claim 23, wherein each side roller includes a ledge configured to support an edge of the developing film.

25. The film bridge as recited in claim 24, wherein each ledge is configured to support an edge portion of film outward of the film sprocket holes.

26. The film bridge as recited in claim 23, wherein each side roller includes a guide wall to restrain lateral movement of the film.

27. The film bridge as recited in claim 23, wherein the spacing between the side rollers is greater than the width of photographic film between sprocket holes.

28. The film bridge as recited in claim 23, further comprising:
a radiation source positioned between the side rollers; and
a radiation sensor positioned between the side rollers.

29. A film bridge for a film scanning system, comprising:
a first bridge member having a film facing surface to support photographic film moving relative to the bridge;
a second bridge member having a film facing surface to support photographic film moving relative to the bridge, wherein the bridge members are spaced so as to define an opening between the bridge members for passing radiation through film traveling relative to the film facing surfaces;
wherein the bridge members are connected near their ends such that the opening has a defined length; and
wherein the length of the opening is less than the width between the sprocket holes of the film to be scanned.

30. The film bridge as recited in claim in claim 29, wherein the bridge members are elongated strips, wherein each strip is curved in the film travel direction, and wherein the opening comprises an elongated slot defined between the strips.